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10/594,456	09/26/2006	Taichi Majima	0670-7088	9290
31780	7590	06/23/2009	EXAMINER	
ERIC ROBINSON			GHOWRWAL, OMAR J	
PMB 955			ART UNIT	
21010 SOUTHBANK ST.			PAPER NUMBER	
POTOMAC FALLS, VA 20165			2416	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/594,456

Applicant(s)

MAJIMA, TAICHI

Examiner

OMAR GHOWRWAL

Art Unit

2416

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SG/US)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Remarks

1. This Office action is considered fully responsive to the amendment filed 5/6/09.
2. The rejection under U.S.C. 101 has been withdrawn because the claim has been amended accordingly.
3. The rejection under U.S.C. 112 has been withdrawn because the claim has been amended accordingly.
4. The objections to the claims have been withdrawn because they have been amended accordingly.
5. The objection to the specification has been withdrawn.

Response to Arguments

6. Applicant's arguments with respect to claims 11-12 have been considered but are moot in view of the new ground(s) of rejection.
7. Applicant's arguments filed 5/6/09 have been fully considered but they are not persuasive. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Specifically, regarding arguments that Marks does not teach or suggest that the header could or should contain voice data (pertaining to all independent claims), it should be noted that JOHNSON teaches "replacing the voice data which is discriminated that it indicates silent voice with silence descriptor "SID" frames". What

was not taught was that the replacement of the voice data was "data of identifying the group". Marks teaches that a field of data (in this case, it may pertain to the voice data as taught by JOHNSON as the references are to be taken in *combination*) can be replaced with a group header identifier.

Applicant also argues that there was no sufficient reason to modify Marks so that a group header identifier would be used to replace voice data. The Examiner assumes Applicant meant there was no sufficient reason to modify JOHNSON, as that is the primary reference being modified by a secondary reference, and there was no reason to further modify Marks as it was used to teach this concept in combination with JOHNSON. Note that there are suggestion/motivation statements for every combination listed, hence providing reasoning.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. **Claim 11** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the terms "uttered" and "unuttered" are not mentioned anywhere in the specification. For example, page 10, lines 24-30 of the instant specification mention encoding "sonant" or "silent" voice data, and "silent"

voice data doesn't necessarily mean a voice is "unuttered" as the volume may simply be under a reference level.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 11-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/27745 *JOHNSON et al.* ("*JOHNSON*") in view of U.S. Patent No. 6,427,135 B1 to *Miseki et al.* ("*Miseki*") and in further view of U.S. Publication No. 2005/0080870 A1 to *Marks et al.* ("*Marks*").

As to **claim 11**, *JOHNSON* discloses a communication method used in a group call communication in which communication is performed among a plurality of members belonging to a predetermined group (see fig. 3, communication between different devices), the method comprising the steps of:

at a transmitting end,

encoding an uttered section of an inputted analog voice signal to generate voice data (page 9, lines 3-15, speech coder replaces non voice times with SID frames);

sequentially inputting the generated voice data to be a transmission object, and discriminating whether a voice which is indicated by the inputted voice data is silent (page 9, lines 3-15 whenever a voice activity detector VAD determines that voice is no

longer active, a transmitter may enter DTX mode, and it ceases to transmit in every one of its assigned timeslots, however it transmits the voice data otherwise);

replacing the voice data which is discriminated that it indicates silent voice with silence descriptor "SID" frames (page 9, lines 7-10);

and performing wireless transmission of SID frames, with voice data indicating voice, at a transmitting end (page 9, lines 3-31, DTX periods and non-DTX periods are transitioned between each other when a speech frame and SID frames are transmitted with each other).

and at a receiving end, receiving a signal which has been wirelessly transmitted (page 9, lines 14-31);

discriminating the voice data and the SID frames (page 9, lines 14-31, DTX vs. non DTX periods);

determining whether or not the received signal is to be reproduced, on the basis of the SID frames (page 9, lines 14-31, depending on the state is a DTX period, "comfort noise" or voice is played);

and when it is determined that the received signal is to be reproduced, reproducing voice data for voice data sections and reproducing silence for sections of the SID frames (page 9, lines 14-31, depending on period, "comfort noise" (no voice) based on silence descriptor or voice is played).

JOHNSON does not expressly disclose encoding *the whole* of an inputted analog voice signal *regardless whether the signal is in an uttered section or an unuttered*

section to generate voice data; replacing the voice data which is discriminated that it indicates silent voice with *data identifying of the group*.

Miseki discloses an input speech signal is separated into a speech component and a background noise component, and both of them are encoded (abstract).

JOHNSON and *Miseki* are analogous art because they are from the same field of endeavor with regards to data processing.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to incorporate the encoding all data as taught by *Miseki* into the invention of *JOHNSON*. The suggestion/motivation would have been to encode speech at a low bit rate that includes background noise that is as close to the original speech as possible (*Miseki*, col. 1, lines 10-15).

Marks discloses one or more header fields in requests from a client may be replaced by a group header identifier (para. 0006).

JOHNSON, *Miseki* and *Marks* are analogous art because they are from the same field of endeavor with regards to data processing.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to incorporate the replacing header fields with a group header identifier as taught by *Marks* into the invention of *JOHNSON* and *Miseki*. The suggestion/motivation would have been to reduce overhead of the messages transmitted (*Marks*, para. 0006).

As to claim 12, *JOHNSON*, *Miseki* and *Marks* further disclose the communication method according to claim 11, wherein the transmitting end further comprises a step of forming a transmission frame from the voice data and the replaced data of identifying

the group (JOHNSON, figs. 2, 5, speech is transmitted in frames, Marks, para. 0006, group identification in header, i.e. a frame with a header), the step setting a steal flag which shows the presence of the voice data at the time of transmission (JOHNSON, page 5, lines 11-20, flag F1 shows presence of speech data);

and wherein the receiving end further comprises a step of discriminating the presence of the replaced data of identifying the group on the basis of the steal flag in the received signal (JOHNSON, page 6, lines 14-15, steal flag F1 utilized in determining whether a given received frame contains speech, i.e. if it is present, there is not any silent data (data identifying group of Marks)). In addition, the same suggestion/motivation of claim 11 applies.

12. **Claims 13-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/27745 *JOHNSON et al.* ("*JOHNSON*") in view of U.S. Publication No. 2005/0080870 A1 to *Marks et al.* ("*Marks*").

As to **claim 13**, *JOHNSON* discloses a receiving method used in a group call communication in which communication is performed among a plurality of members belonging to a predetermined group (see fig. 3, communication between different devices), the method comprising the steps of:

receiving by a reception unit a wireless transmitted signal including data of identifying the group and voice data of representing voice, FACCH identifying signal voice data indicative of silence (figs. 2, 5, page 6, lines 11-14, grouped frames FR within multiframe MF2 can contain either speech or control signals, page 2, lines 23-25 as is understood in the art FACCH control signals cause a speech decoder to mute, i.e.

transmitter constructs multiframe MF1 to be made up of speech frames, but some of them are silent);

discriminating by a reception unit the voice data and the FACCH in the received signal (fig. 2, 5, receiver detects speech frames from FACCH frames (MF2-MF3));

determining by a reception unit whether or not the received signal is to be reproduced, on the basis of the FACCH (fig. 2, 5, receiver detects speech frames from FACCH frames, reproduces the data in MF3);

and when it is determined that the received signal is to be reproduced, reproducing voice data for voice data sections and reproducing silence for sections of the FACCH, by using a reproduction unit (fig. 2, 5, receiver detects speech frames from FACCH frames, reproduces the data in MF3, page 2, lines 23-25 as is understood in the art FACCH control signals cause a speech decoder to mute).

JOHNSON does not expressly disclose *replacing* the voice data which is discriminated that it indicates silent voice with *data identifying of the group*.

Marks discloses one or more header fields in requests from a client may be replaced by a group header identifier (para. 0006).

JOHNSON and *Marks* are analogous art because they are from the same field of endeavor with regards to data processing.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to incorporate the replacing header fields with a group header identifier as taught by *Marks* into the invention of *JOHNSON*. The suggestion/motivation would have been to reduce overhead of the messages transmitted (*Marks*, para. 0006).

As to **claim 14**, see similar rejection for **claim 13**. The method teaches the apparatus.

As to claim 15, *JOHNSON and Marks* further discloses the receiving apparatus according to claim 14, wherein the reception means operates so as to receive a frame signal (JOHNSON, fig. 2, 5 multiframe);

wherein the detection means operates so as to detect predetermined data in a voice signal included in the frame signal (JOHNSON, fig. 2, 5, detecting speech frames);

wherein the reproduction means operates so as to reproduce the voice signal in the frame signal which is received by the reception means (JOHNSON, fig. 2, 5, reproducing speech frames in MF3), and further to reproduce the predetermined voice when data of identifying the group data is detected by the detection means (JOHNSON, fig. 2, 5, reproducing speech frames and FACCH frames in MF3, i.e. using group identifier of Marks for FACCH);

and wherein the control means operates to execute processing based on the data of identifying the group detected by the detection means (Marks, para. 0006, requests processed based upon the respective group header identifiers). In addition, the suggestion/motivation would have been to reduce the overhead of messages transmitted (Marks, para. 0006).

As to claim 16, *JOHNSON and Marks* further discloses the receiving apparatus according to claim 15, wherein a predetermined control flag which shows the presence of the data of identifying the group is set in the frame signal (JOHNSON, page 5, lines

11-20, flags F1 and F2 distinguish speech from FACCH, i.e. using group identifier of Marks for FACCH);

and wherein the detection means operates so as to detect the data of identifying the group on the basis of the predetermined control flag (JOHNSON, page 6, lines 14-15, steal flags F1 and F2 are utilized in determining whether a given received frame contains speech or FACCH, i.e. using group identifier of Marks for FACCH). In addition, the suggestion/motivation of claim 15 applies.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OMAR GHOWRWAL whose telephone number is

(571)270-5691. The examiner can normally be reached on Monday-Thursday, 8:00am-5:00pm est..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derrick Ferris can be reached on (571)272-3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/O. G./
Examiner, Art Unit 2416
/Derrick W Ferris/
Supervisory Patent Examiner, Art Unit 2416